

# Soldier/Ground Systems Life Cycle Management Command

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Current collaborative efforts to support readiness and cost goals for the AGT 1500 engine for M1 series Abrams tanks employ Lean/Six Sigma initiatives and process standardization across the entire Totally Integrated Engine Revitalization project.

**T**he Life Cycle Management Commands (LCMCs) were established in August 2004 to better integrate the Army's systems program management (acquisition), sustainment (logistics) and research,

development and engineering activities (technology). The Soldier and Ground Systems (S&GS) LCMC is one of four LCMCs created for this purpose. The S&GS LCMC consists of the following organizations:



Tank-automotive and Armaments Command (TACOM)



Program Executive Office Ground Combat Systems (PEO GCS)



PEO Combat Support and Combat Service Support (CS&CSS)



PEO Soldier



The S&GS LCMC's enterprise partners include the Research, Development and Engineering Command's (RDECOM's) Tank Automotive Research and Development Center (TARDEC), the Armaments Research and Development Center (ARDEC) and the Natick Soldier Center. Our enterprise partners have an important, but not exclusive, alignment with the S&GS LCMC. All seven S&GS LCMC organizations share the same goals and objectives — get products to the warfighter faster, make

enterprise partners' relationships for support.

The Army's LCMC initiative represents a reversal of its previous approach to AL&T management and

integration. During the 1990s, Army PMs left the major subordinate commands to come under the Assistant Secretary of the Army for AL&T's direction. Therefore, where it was feasible to do so, logisticians and engineers worked alongside acquisition professionals, often collocated in integrated product teams (IPTs). However, after several years and numerous lessons learned, the Army's senior leaders found that this approach tended to suboptimize total capabilities and level of integration. When the

LCMC initiative was announced, AL&T community leaders studied the timing, change rate, cultural transformation factors and other elements of the

good products even better, minimize life-cycle costs and enhance the effectiveness and integration of the acquisition, logistics and technology (AL&T) communities. Our primary immediate task is to make significant improvements in our S&GS LCMC's level of cooperation, collaboration and communication. Although it's clear that a single approach may not fit each organization, S&GS LCMC's leadership is committed to this endeavor's success. Figure 1 depicts the S&GS LCMC Program/Project Management (PM) and Joint Program Management (JPM) organizations and

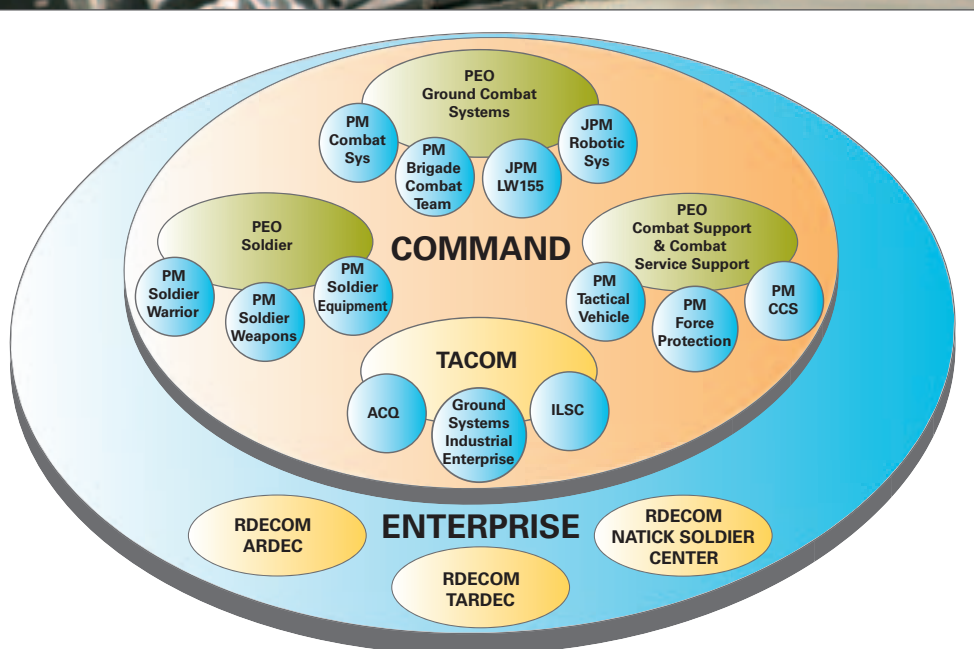


Figure 1. The S&GS Enterprise

previous approach. The community is now better prepared to more fully integrate all AL&T activities into a comprehensive life-cycle management (LCM) effort.

Because of our earlier experiences with realignments and mergers, and because of the broad geographical range of participating organizations, senior leaders became directly involved in establishing and implementing S&GS LCMC. The S&GS community includes seven parent organizations with operations and personnel in dispersed locations throughout the country. To their credit, leaders recognized that all parent organizations must be intimately involved in the effort to give birth to this new organization. Commanders and leaders from the parent organizations gathered to form the S&GS Executive Steering Committee (ESC). A working group was also established to manage the details of creating, implementing and nurturing the new S&GS organization's development.

Our S&GS leaders agree that the community will not view the LCMC as a merger or realignment, but rather as a refinement of the groundwork already performed in the development of our LCM teams. ESC leaders are sensitive to the fact that true cultural change requires time and ownership. They also recognized that to truly address organizational change, existing processes must be studied and refined. Our leadership decided to implement the LCMC in a phased approach. The implementation phases are loosely identified as minor (initial)

organizational changes, process identification, process modification, measurement and, if necessary, additional organizational changes.

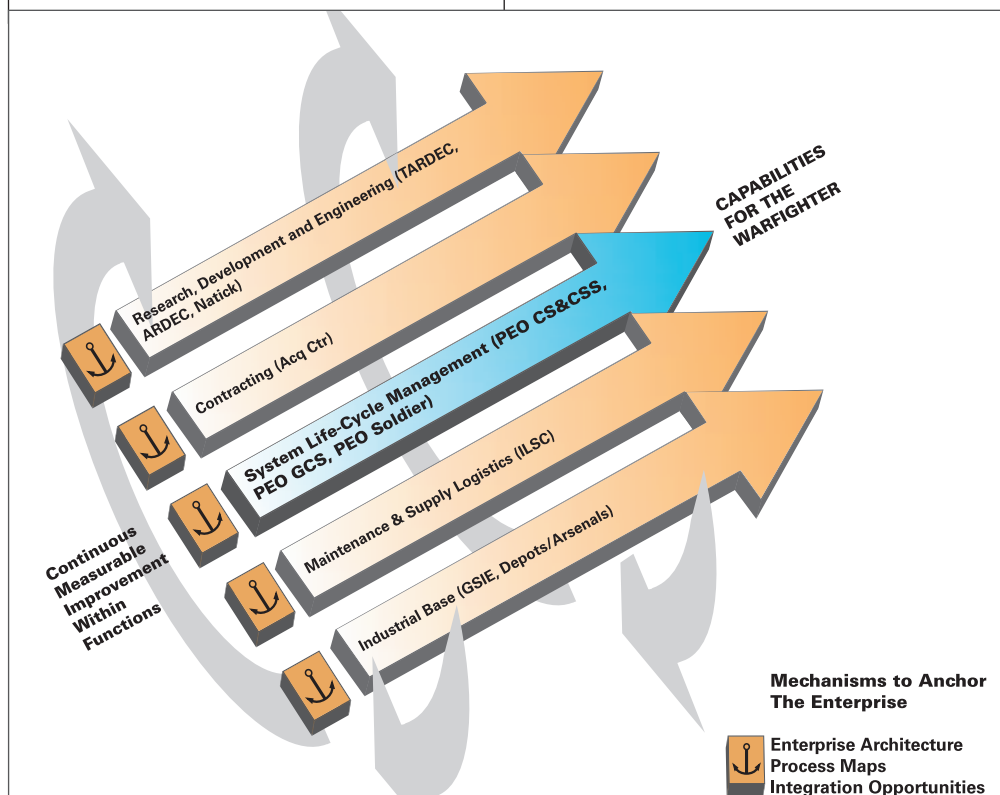
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The S&GS LCMC cultivates existing relationships, builds new relationships and synchronizes multiple processes and initiatives that are already in place. It fosters and integrates cross-service management while incorporating continuous measurable improvement within all functional areas. At the heart of this effort is the institutionalization of fact-based decision making that uses Lean/Six Sigma practices and related tools and methodologies.

The LCMCs are not founded on command and control, but on the more productive principles of collaboration, coordination and communication. We are basing our future direction on process identification, process ownership, greater effectiveness and efficiency and a strategic workforce development plan that will benefit the entire S&GS community. Figure 2 illustrates the S&GS business model.

Our S&GS LCMC implementation plan will focus on LCM processes. The S&GS community recognizes the need to map existing processes to establish a baseline. From this baseline, process gaps, flow problems and redundancy will be identified to help achieve more effective and efficient end-state processes and maps.

This application of Lean/Six Sigma methodology has led to the completion of level 0 and level 1 process maps. These maps identify processes



**Figure 2. Managing the S&GS Enterprise Synchronizing Multiple Processes**



Humvee ASKs on point in Iraq and Afghanistan — armor protection for Soldiers brought to theater through the collaborative work efforts of the S&GS community's acquisition, logistics, technology and engineering professionals.



throughout the system life cycle as performed by our contracting, research, development, engineering, program management, supply/maintenance logistics and industrial base activities. More detail mapping will continue from this baseline to identify areas of opportunity and to modify processes that will ultimately lead to the creation and validation of a new organizational structure. This effort will be conducted in a “block” approach that will identify those opportunities for improvement with the greatest payback. The top 5-7 process areas will become the block 1 focus with the next 5-7 process areas becoming block 2. This deliberate approach will not develop instant opportunities for improvement, but it will identify high-payback areas that can be carefully and appropriately instituted over time.

Our S&GS LCMC community leaders have begun to encourage, reinforce

and reward the adoption of those principles and practices that will promote the cultural changes necessary for successful implementation. A comprehensive communications plan has been developed and will include workforce messages from S&GS senior leaders, community town hall meetings, aggressive marketing of the guiding principles and operating models and the creation of a single S&GS information site on Army Knowledge Online (AKO). The AKO information Web site resides in an LCM area rather than in the AL&T areas of AKO. Our community news report has been renamed and reformatted

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to address the entire S&GS LCMC's concerns. The development of the Humvee Armor Survivability Kits (ASKs) provides an excellent example of the collaborative working environment within the S&GS community. During *Operation Iraqi Freedom*, our vehicle users identified the need to have more armor protection for their Humvees. To better protect more warfighters, it was necessary to develop, test, produce and field the ASKs quickly. Every S&GS organization came into the IPT environment with the single focus of providing soldiers with greater protection. Acquisition, logistics and engineering professionals worked



Making good products even better — a Stryker on patrol in Iraq. When Soldiers identified a need for a field-expedient solution to protect their vehicles from rocket-propelled grenade attacks, the S&GS community responded with “slat armor,” a low-tech, low-cost but highly effective deterrent.

together to design and test the system. Our industrial base workforce assisted in ASK planning and production efforts. As a result, more than 8,000 ASKs have been fielded and the kits continue to be applied to vehicles in theater at an accelerated rate.

Another example of benefits derived from S&GS workforce collaboration are current efforts to support readiness and cost goals for the AGT 1500 engine that powers the M1 series tank. Previous support for the AGT 1500 engine resulted in narrow stovepipe suboptimization of resources, resulting in missed production schedules, variations in durability, inconsistent field support and increased operation and support (O&S) costs. The current

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ongoing Totally Integrated Engine Revitalization project, a Lean/Six Sigma Black Belt project, brings together resources from PEO GCS, TARDEC, TACOM's Integrated Logistics Support Center (ILSC), Acquisition Center, Anniston Army Depot and the contractor (Honeywell). Working together, this collaborative team is well on its way toward consistent delivery of higher quality products with no increased O&S costs, steady supplies of quality parts, increased durability, consistent production schedules and improved support to the field and various vehicle programs.

The S&GS LCMC initiative unites all of the organizations that focus on soldier and ground systems — from

product development to system support. With strong leadership support and an S&GS workforce that's committed to collaboration, coordination and communication, this effort promises to bear great fruit for our Joint warfighters.

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